

# Comments on Criteria and Guidelines

Ian Freeston

EUR-ACE Steering Committee

# Hierarchy of Standards

## Dublin Descriptors.

- expected attributes from Short, First, Second and Third Cycles;
- independent of educational process.

## EUR-ACE Outputs.

- attributes of graduates in engineering from First and Second Cycle programmes;
- Second Cycle is the educational qualification for professional engineer.

## BIOMEDEA.

- identifies the Biomedical Engineering topics to be taught;
- does it incorporate the above standards into statements about graduates from Bioengineering programmes?

# Types of Degree

- EUR-ACE applies equally to all types of degree (section 5.1).
- And to both research and professionally oriented programmes (section 6.1)
- Do the specified contents (section 6.4) reflect future possibilities and markets?

# Breadth and Depth

- EUR-ACE outcomes are well adapted to mainstream engineering.
- Biomedical Engineering needs technical breadth (mechanical, electronic, etc) as well physiology.
- Can Biomedical Engineering programmes attain the depth specified by EUR-ACE (and the Dublin Descriptors)?
- What agency would accredit Biomedical Engineering programmes?

# Student Perspective

- If I study Biomedical Engineering, will I be able to get a job in mainstream engineering?
- Should I study mainstream engineering in 1st Cycle and Biomedical Engineering in 2nd Cycle?
- Can I work as a biomedical engineer if I am a graduate in mainstream engineering?
- How would the Biomedical Engineering community answer these questions from potential students?